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PTO/SB/22 (08-03)

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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)		Docket Number (Optional) 800.0119	
In re Application of Pechanek et al.			
Application Number 10/036,789		Filed 12/21/2001	
For Manifold Array Processor			
Art Unit 2155		Examiner Eng, David Y.	

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and appropriate non-small-entity fee are as follows (check time period desired):

<input checked="" type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$ <u>110.00</u>
<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$ <u>420.00</u>
<input type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$ <u>950.00</u>
<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$ <u>1,480.00</u>
<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$ <u>2,010.00</u>

☐ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee amount shown above is reduced by one-half, and the resulting fee is: \$ _____.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-1058.

I have enclosed a duplicate copy of this sheet.

I am the ☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/98).

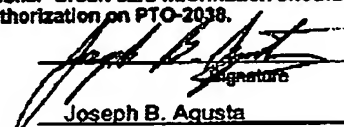
☐ attorney or agent of record. Registration Number _____

☒ attorney or agent under 37 CFR 1.34(a).
Registration number if acting under 37 CFR 1.34(a) 52,547.

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July 13, 2004 _____
Date

919-806-1600 _____
Telephone Number


Joseph B. Aquista
Typed or printed name

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ Total of 3 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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14. (Previously Presented) A hydraulic actuator system comprising:
a pump having a fluid feed and a fluid release;
a hydraulic actuator having an advance port and a retract port;
a directional converter fluidically coupled between said pump and said hydraulic actuator, said directional converter comprising,

a housing having a plurality of fluid passages therethrough, said plurality of passages terminating in a pump outlet port, a pump inlet port, a first actuator port and a second actuator port, said passages having a passage direction; and

a plurality of valves disposed within said plurality of fluid passages perpendicular to said passage direction, said plurality of valves having a first position and a second position, wherein in a first position a first fluid flow direction at the first actuator port is into said housing from the actuator and a second fluid flow direction at the second actuator port is out of the housing and when the plurality of valves are in a second position the first fluid flow direction at the first actuator port is out of said housing and second fluid flow direction at said second actuator port is into said housing.

15. (Original) A hydraulic actuator system as recited in claim 14 wherein the pump is a single directional pump.

16. (Original) A hydraulic actuator system as recited in claim 14 wherein the actuator comprises a two-way ram.

17. (Original) A hydraulic actuator system as recited in claim 14 wherein the plurality of valves comprise a plurality of normally closed valves.

18. (Original) A hydraulic actuator system as recited in claim 14 further comprising a foot pedal, wherein said foot pedal is operably coupled to said plurality of valves.

19. (Original) A hydraulic actuator system as recited in claim 14 wherein the plurality of fluid passages comprises a first fluid passage fluidically coupled between the pump inlet port and the first actuator port.

20. (Original) A hydraulic actuator system as recited in claim 14 wherein the plurality of fluid passages comprises a second fluid passage fluidically coupled between the pump inlet port and the second actuator port.

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21. (Original) A hydraulic actuator system as recited in claim 14 wherein the plurality of fluid passages comprises a third fluid passage fluidically coupled between the pump outlet port and the second actuator port.

22. (Original) A hydraulic actuator system as recited in claim 14 wherein the plurality of fluid passages comprises a fourth fluid passage fluidically coupled between the pump outlet port and the first actuator port.

23. (Original) A hydraulic actuator system as recited in claim 14 further comprising a foot pedal operably coupled to the plurality of valves.

24. (Original) A hydraulic actuator system as recited in claim 23 further comprising a lock operably coupled between said pedal and said housing.

25. (Previously Presented) A frame rack system comprising:

a rack deck;

a pump;

a hydraulic actuator coupled to said rack deck;

a directional converter fluidically coupled between said pump and said hydraulic actuator, said direction converter comprises:

a housing having a plurality of fluid passages therethrough, said passages having a passage direction, said plurality of passages terminating in a pump outlet port, a pump inlet port, a first actuator port and a second actuator port; and

a plurality of valves disposed within said plurality fluid passages, said valves oriented perpendicular to the passage direction, said plurality of valves having a first position and a second position, wherein in a first position a first fluid flow direction at the first actuator port is into said housing from the actuator and a second fluid flow direction at the second actuator port is out of the housing and when the plurality of valves are in a second position the first fluid flow direction at the first actuator port is out of said housing and second fluid flow direction at said second actuator port is into said housing.

26. (Original) A frame rack system as recited in claim 25 wherein the pump is integrated into the rack.

27. (Original) A frame rack system as recited in claim 25 wherein in the pump is a separate from the actuator rack.

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28. (Original) A frame rack system as recited in claim 26 wherein the pump comprises a foot-operated pump.

29. (Original) A frame rack system as recited in claim 25 wherein the pump is a single directional pump.

30. (Original) A frame rack system as recited in claim 25 wherein the actuator comprises a two-way ram.

31. (Original) A frame rack system as recited in claim 25 wherein the plurality of valves comprise a plurality of normally closed valves.

32. (Original) A frame rack system as recited in claim 25 further comprising a foot pedal, wherein said foot pedal is operably coupled to said plurality of valves.

33. (Original) A frame rack system as recited in claim 25 wherein the plurality of fluid passages comprises a first fluid passage fluidically coupled between the pump inlet port and the first actuator port.

34. (Original) A frame rack system as recited in claim 25 wherein the plurality of fluid passages comprises a second fluid passage fluidically coupled between the pump inlet port and the second actuator port.

35. (Original) A frame rack system as recited in claim 25 wherein the plurality of fluid passages comprises a third fluid passage fluidically coupled between the pump outlet port and the second actuator port.

36. (Original) A frame rack system as recited in claim 25 wherein the plurality of fluid passages comprises a fourth fluid passage fluidically coupled between the pump outlet port and the first actuator port.

37. (Original) A frame rack system as recited in claim 25 further comprising a foot pedal operably coupled to the plurality of valves.

38. (Original) A frame rack system as recited in claim 37 further comprising a lock operably coupled between said pedal and said housing.

39. (Previously Presented) A method for operating a hydraulic actuator comprising:

providing a pump coupled to an actuator through a converter;

actuating a plurality of switches in a first position and a second position;

actuating valves oriented perpendicular to a plurality of fluid passages with the plurality of switches;

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in a first position, flowing hydraulic fluid a first fluid flow direction at a first actuator port into a housing from the actuator and a second fluid flow direction at the second actuator port out of the housing; and

when the switches are in a second position, flowing fluid in the first fluid flow direction at the first actuator port out of said housing and second fluid flow direction at said second actuator port into said housing.

40. (Original) A method as recited in claim 39 further comprising extending the actuator in response to the switches in the first position.

41. (Original) A method as recited in claim 39 further comprising retracting an actuator when the switch is in the second position.

42. (Previously Presented) A directional converter for use with a pump and a hydraulic actuator having an advance and retract ports comprising:

a housing having a plurality of fluid passages therethrough, said plurality of passages terminating in a pump outlet port and a pump inlet port disposed on a first face of the housing, and a first actuator port and a second actuator port disposed on a second face of the housing opposite the first face; and

a plurality of valves disposed within said plurality fluid passages, said plurality of valves having a first position and a second position, wherein in a first position a first fluid flow direction at the first actuator port is into said housing from the actuator and a second fluid flow direction at the second actuator port is out of the housing and when the valves are in a second position the first fluid flow direction at the first actuator port is out of said housing and second fluid flow direction at said second actuator port is into said housing.

43. (Previously Presented) A directional converter as recited in claim 42 wherein the plurality of valves comprises a plurality of normally closed valves.

44. (Previously Presented) A directional converter as recited in claim 42 further comprising a foot pedal, wherein said foot pedal is operably coupled to said plurality of valves.

45. (Previously Presented) A directional converter as recited in claim 42 wherein the plurality of fluid passages comprises a first fluid passage fluidically coupled between the pump inlet port and the first actuator port, a second fluid passage fluidically coupled between the pump inlet port and the second actuator port, a third fluid passage fluidically coupled between the pump outlet port and the second actuator port, and a fourth fluid passage fluidically coupled between the pump outlet port and the first actuator port.

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46. (Previously Presented) A directional converter as recited in claim 42 further comprising a foot pedal operably coupled to the plurality of valves.

47. (Currently Amended) A directional converter as recited in ~~claim 42~~ claim 46 further comprising a lock operably coupled between said pedal and said housing.

48. (Previously Presented) A hydraulic actuator system comprising:
a pump having a fluid feed and a fluid release;
a hydraulic actuator having an advance port and a retract port;
a directional converter fluidically coupled between said pump and said hydraulic actuator, said directional converter comprising,

a housing having a plurality of fluid passages therethrough, said plurality of passages terminating in a pump inlet port and a pump outlet port disposed on a first face of the housing, and a first actuator port and a second actuator port disposed on a first face of the housing opposite the first face; and

a plurality of valves disposed within said plurality fluid, said plurality of valves having a first position and a second position, wherein in a first position a first fluid flow direction at the first actuator port is into said housing from the actuator and a second fluid flow direction at the second actuator port is out of the housing and when the plurality of valves are in a second position the first fluid flow direction at the first actuator port is out of said housing and second fluid flow direction at said second actuator port is into said housing.

49. (Previously Presented) A hydraulic actuator system as recited in claim 48 further comprising a foot pedal operably coupled to the plurality of valves.

50. (Previously Presented) A frame rack system comprising:
a rack deck;
a pump;
a hydraulic actuator coupled to said rack deck;
a directional converter fluidically coupled between said pump and said hydraulic actuator, said direction converter comprises:

a housing having a plurality of fluid passages therethrough, said plurality of passages terminating in a pump inlet port and pump outlet port disposed on a first face of the housing, and a first actuator port and a second actuator port disposed on a second face of the housing opposite the first face; and

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a plurality of valves disposed within said plurality fluid passages, said plurality of valves having a first position and a second position, wherein in a first position a first fluid flow direction at the first actuator port is into said housing from the actuator and a second fluid flow direction at the second actuator port is out of the housing and when the plurality of valves are in a second position the first fluid flow direction at the first actuator port is out of said housing and second fluid flow direction at said second actuator port is into said housing.

51. (Previously Presented) A frame rack system as recited in claim 48 further comprising a foot pedal operably coupled to the plurality of valves

52. (Previously Presented) A directional converter as recited in claim 1 wherein said pump outlet port and said pump inlet port is disposed on a first face of the housing and said first actuator port and said second actuator port are disposed on a second face of the housing opposite the first face.

53. (Previously Presented) A hydraulic actuator system comprising:
a single direction pump having a fluid feed and a fluid release;
a hydraulic actuator having an advance port and a retract port;
a directional converter fluidically coupled between said pump and said hydraulic actuator, said directional converter comprising,

a housing having a plurality of fluid passages therethrough, said plurality of passages terminating in a pump outlet port, a pump inlet port, a first actuator port and a second actuator port;

a pedal coupled to said housing; and

a plurality of valves disposed within said plurality fluid passages and extending from a face of said housing, said pedal operably coupled to said plurality of valves, said plurality of valves and said pedal having a first position and a second position, wherein in a first position a first fluid flow direction at the first actuator port is into said housing from the actuator and a second fluid flow direction at the second actuator port is out of the housing and when the plurality of valves are in a second position, the first fluid flow direction at the first actuator port is out of said housing and second fluid flow direction at said second actuator port is into said housing.